03050202-010

(Cypress Swamp)

General Description

Watershed 03050202-010 is located in Berkeley and Dorchester Counties and consists primarily of *Cypress Swamp* and its tributaries from its origin to Captains Branch. The watershed occupies 100,347 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Rains-Hobcaw-Lynchburg-Mouzon series. The erodibility of the soil (K) averages 0.20; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 71.5% forested land, 13.2% forested wetland, 6.6% agricultural land, 6.6% scrub/shrub land, 0.9% urban land, 0.6% barren land, 0.5% water, and 0.1% nonforested wetland.

Williams Branch flows into Big Run and is joined by Black Creek to form Wassamassaw Swamp, which accepts drainage from Mill Branch, Caton Creek, and Simmons Bay. Partridge Creek (Rudd Branch, Mill Branch) joins Wassamassaw Swamp to form the headwaters of the Cypress Swamp. The Cypress Swamp receives drainage from Sandy Run (Smith Branch), Miller Dam Branch, Felder Branch, Dawson Branch, Stanley Branch (Kelly Branch), and Green Bay Branch near the Town of Ridgeville. There are a total of 236.4 stream miles in this watershed, all classified FW.

Water Quality

Station #	Type	Class	Description
CSTL-063	P	FW	WASSAMASSAW SWAMP AT U.S. 176
CSTL-078	W	FW	CYPRESS SWAMP AT U.S. 78

Wassamassaw Swamp (CSTL-063) - Aquatic life uses are fully supported, but there is a significant increasing trend in turbidity. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred, they were typical of values seen in such systems and were considered natural, not standards violations. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentrations suggest improving conditions for these parameters. P,P'DDT was detected in the 1995 and 1997 sediment samples and P,P'DDE was also detected in the 1995 sample. Although the use of DDT was banned in 1973, it is very persistent in the environment. Recreational uses are partially supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentrations.

Cypress Swamp (CSTL-078) - Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are not supported due to fecal coliform bacteria excursions.

NPDES Program

Active NPDES Facilities

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)

NPDES#
TYPE
LIMITATION

COMMENT

MILL BRANCH SCG730115

D&A PARTNERSHIP/CUMBIE PIT MINOR INDUSTRIAL

PIPE #: 001 FLOW: M/R EFFLUENT

Nonpoint Source Management Program

Mining Activities

MINING COMPANY PERMIT #
MINE NAME MINERAL

ACD, A PARTNERSHIP 0625-15 DANGERFIELD MINE (17A) SAND/CLAY

SALISBURY BRICK CORPORATION 0722-15 NEW HOPE MINE CLAY

BROWNING-FERRIS IND. OF S. ATLANTIC 0837-15
JEDBURG, S-8-16 SAND/CLAY

SALISBURY BRICK CORPORATION 0562-35 SALISBURY BRICK MINE CLAY

SALISBURY BRICK CORPORATION 0972-35 RED HILL MINE CLAY

SALISBURY BRICK CORPORATION 0979-35 DUKES MINE CLAY

JOHN R. CUMBIE 0747-15 JOHN R. CUMBIE MINE SAND/CLAY

TRULUCK INDUSTRIES, INC. 0935-15 BERKELEY MINE SAND

Land Disposal Activities

Landfill Facilities

SOLID WASTE LANDFILL NAME PERMIT #
FACILITY TYPE STATUS

WESTVACO 082430-1601 (IWP-201)

INDUSTRIAL ACTIVE

BFI DWP-129, DWP-163

MUNICIPAL CLOSED

TRIDENT NORTH LANDFILL (BFI) IWP-163

INDUSTRIAL CLOSED

Growth Potential - Low density population growth is projected to occur in this watershed.